

## „Differential“ epidemiology? Results of a data base and WWW search

R Fehr, C Terschüren

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**Background:** Epidemiology in most applications aims at establishing universally valid cause–effect relationships in populations. There are epidemiological tasks with a different thrust, however, aiming at the characterization of specific populations, defined in space and time. Such information on distinctive features can be needed, e.g., for estimating health (care) needs of populations, or predicting impacts of local development projects. In these cases, methods include (indicator–based) monitoring and surveillance, reporting, estimating burdens of disease, and clustering / profiling. These tasks seem not to be adequately described by terms such as “Descriptive analysis” or “Analysis of local data”. In analogy to “Differential psychology” which, based on psychological test batteries, provides diagnostics and prognoses of individual personality and development, it may be useful to consider the term “Differential epidemiology” instead.

**Methods:** The current use of the expression “Differential epidemiology” is explored by means of data base and WWW searches.

**Results:** As for the term in German spelling, there were no hits. For the English term, the search engines identified 179 entries in the WWW (and very few in databases). After exclusion of duplicates, false positives, and items with damaged links, 81 interpretable hits were left. These included 32 original literature sources, most of them web documents or “grey” reports, but also original papers and lecture slides, and some abstracts and books. In these web–based documents, the term “Differential epidemiology” was used to describe differences in incidence of selected disease; disease patterns in children or adolescents in comparison to adults; and different health effects of similar toxic substances.

**Discussion:** Assuming that the role of epidemiological characterisation of defined populations may continue to increase, it may be desirable to label such approaches appropriately. The term “Differential epidemiology” is currently used only sporadically and inconsistently, so it seems available for the detailed epidemiological characterisation of populations.